



## Schizoaffective disorder

Schizoaffective disorder is a mental health condition that includes features of both schizophrenia and a mood disorder such as bipolar disorder or depression. The prefix "schizo-" refers to the psychotic symptoms of schizophrenia that affect a person's thinking, sense of self, and perceptions. The term "-affective" refers to extreme shifts in mood, energy, and behavior.

Schizoaffective disorder has a wide range of signs and symptoms that make it challenging to diagnose. Its features overlap significantly with those of schizophrenia and bipolar disorder, and there is debate about whether schizoaffective disorder should be considered a separate diagnosis or a subtype of one of these other conditions.

Signs and symptoms of psychosis in people with schizoaffective disorder include false perceptions called hallucinations, such as hearing voices no one else can hear or experiencing visions, smells, or tactile (touch) sensations. Strongly held false beliefs (delusions) are also a characteristic feature. For example, affected individuals may be certain that they are a particular historical figure or that they are being plotted against or controlled by others.

There are two major types of schizoaffective disorder, based on which mood disorder is involved: the bipolar type and the depressive type. The bipolar type includes both dramatic "highs," called manic episodes, and "lows," called depressive episodes. The depressive type includes only depressive episodes. Manic episodes are characterized by increased energy and activity, irritability, restlessness, an inability to sleep, and reckless behavior. Depressive episodes are marked by low energy and activity, a feeling of hopelessness, and an inability to perform everyday tasks.

The psychosis and mood problems associated with schizoaffective disorder usually become evident in adolescence or young adulthood. People with this condition often have difficulty functioning at school, at work, and in social settings. Disordered thinking and concentration, inappropriate emotional responses, erratic speech and behavior, and difficulty with personal hygiene and everyday tasks are also common. People with schizoaffective disorder have a higher risk of substance abuse problems and dying by suicide than the general population.

### Frequency

Studies suggest that schizoaffective disorder is less common than schizophrenia, bipolar disorder, or depression alone. However, because schizoaffective disorder can be difficult to differentiate from these other conditions, its prevalence is unknown. One study from Finland estimated that schizoaffective disorder affects 3 in 1,000 people.

## **Causes**

Very little is known for certain about the genetics of schizoaffective disorder. Studies suggest that variations in many genes, each with a small effect, combine to increase the risk of developing the condition. There may also be genetic variations with larger effects in some affected individuals or families, but these variants are rare in the general population, and it is unclear which particular genes are involved.

The genes that have been studied as possible contributors to schizoaffective disorder have diverse functions in the brain. These genes include some that regulate the body's daily (circadian) rhythms, such as the sleep-wake cycle; others that help control the movement (migration) of nerve cells during brain development; and still others involved in sending and receiving chemical signals in the brain. In particular, several genes that have been associated with the risk of schizoaffective disorder provide instructions for making parts of a receptor for gamma-amino butyric acid (GABA), a chemical called a neurotransmitter that sends signals in the brain. GABA's primary role is to prevent the brain from being overloaded with too many signals.

Many of the genetic variations associated with schizoaffective disorder appear also to be involved in schizophrenia or bipolar disorder. Other variations seem to be specific to schizoaffective disorder. However, it is challenging to study the genetics of schizoaffective disorder because the disorder has such significant overlap with these other mental health conditions. In some studies, people with schizoaffective disorder are analyzed in the same group as those with schizophrenia or bipolar disorder, so it can be difficult to determine which genetic variations influence each of these specific diagnoses.

## **Inheritance Pattern**

The inheritance pattern of schizoaffective disorder is unclear. Overall, the risk of developing this condition is greater for first-degree relatives of affected individuals (such as siblings or children) as compared to the general public. Many individuals with schizoaffective disorder also have relatives with depression, bipolar disorder, schizophrenia, or other mental health conditions. These disorders may run in families in part because they share some genetic risk factors with schizoaffective disorder.

Research with twins found that when a member of an identical twin pair has schizoaffective disorder, the risk that the co-twin will also develop the condition is about 40 percent. In nonidentical (fraternal) twins, the risk is lower, around 5 percent. Because identical twins are more genetically similar than nonidentical twins, this finding suggests that genetics plays an important role in schizoaffective disorder. However, the fact that the risk is much lower than 100 percent, even in identical twins, suggests that noninherited factors are also important causes of schizoaffective disorder.

## **Other Names for This Condition**

- schizo-affective psychosis
- schizo-affective type schizophrenia
- schizoaffective psychosis
- schizoaffective schizophrenia
- schizophrenia, schizo-affective type
- schizophreniform psychosis, affective type

## **Diagnosis & Management**

### Formal Treatment/Management Guidelines

- World Health Organization: Evidence-Based Recommendations for Management of Psychosis and Bipolar Disorders in Non-Specialized Health Settings  
[https://www.who.int/mental\\_health/mhgap/evidence/psychosis/en/](https://www.who.int/mental_health/mhgap/evidence/psychosis/en/)

### Genetic Testing Information

- What is genetic testing?  
[/primer/testing/genetictesting](#)
- Genetic Testing Registry: Schizoaffective disorder, depressive type  
<https://www.ncbi.nlm.nih.gov/gtr/conditions/C0270497/>
- International Society of Psychiatric Genetics: Genetic Testing and Psychiatric Disorders  
<https://ispg.net/genetic-testing-statement/>

### Research Studies from ClinicalTrials.gov

- ClinicalTrials.gov  
<https://clinicaltrials.gov/ct2/results?cond=%22schizoaffective+disorder%22>

### Other Diagnosis and Management Resources

- MedlinePlus Medical Tests: Mental Health Screening  
<https://medlineplus.gov/lab-tests/mental-health-screening/>
- National Alliance on Mental Illness: Treatment  
<https://www.nami.org/Learn-More/Mental-Health-Conditions/Schizoaffective-Disorder/Treatment>

## **Additional Information & Resources**

### Health Information from MedlinePlus

- Encyclopedia: Schizoaffective Disorder  
<https://medlineplus.gov/ency/article/000930.htm>
- Health Topic: Bipolar Disorder  
<https://medlineplus.gov/bipolardisorder.html>
- Health Topic: Depression  
<https://medlineplus.gov/depression.html>
- Health Topic: Psychotic Disorders  
<https://medlineplus.gov/psychoticdisorders.html>
- Health Topic: Schizophrenia  
<https://medlineplus.gov/schizophrenia.html>
- Medical Tests: Mental Health Screening  
<https://medlineplus.gov/lab-tests/mental-health-screening/>

### Additional NIH Resources

- National Institute of Mental Health: Bipolar Disorder  
<https://www.nimh.nih.gov/health/topics/bipolar-disorder/index.shtml>
- National Institute of Mental Health: Depression  
<https://www.nimh.nih.gov/health/topics/depression/index.shtml>
- National Institute of Mental Health: Schizophrenia  
<https://www.nimh.nih.gov/health/topics/schizophrenia/index.shtml>

### Educational Resources

- MalaCards: schizoaffective disorder  
[https://www.malacards.org/card/schizoaffective\\_disorder](https://www.malacards.org/card/schizoaffective_disorder)

### Patient Support and Advocacy Resources

- American Foundation for Suicide Prevention  
<https://afsp.org/find-support/>
- Depression and Bipolar Support Alliance  
<https://www.dbsalliance.org/>
- National Alliance on Mental Illness (NAMI)  
<https://www.nami.org/Learn-More/Mental-Health-Conditions/Schizoaffective-Disorder>
- Schizophrenia and Related Disorders Alliance of America (SARDAA)  
<https://sardaa.org/>

### Scientific Articles on PubMed

- PubMed  
[https://www.ncbi.nlm.nih.gov/pubmed?term=%28schizoaffective+disorder%5BTI%5D%29+AND+%28%28gene%5BTIAB%5D%29+OR+%28genes%5BTIAB%5D%29+OR+%28genetic\\*%5BTIAB%5D%29%29+AND+english%5Bla%5D+AND+human%5Bmh%5D](https://www.ncbi.nlm.nih.gov/pubmed?term=%28schizoaffective+disorder%5BTI%5D%29+AND+%28%28gene%5BTIAB%5D%29+OR+%28genes%5BTIAB%5D%29+OR+%28genetic*%5BTIAB%5D%29%29+AND+english%5Bla%5D+AND+human%5Bmh%5D)

### Catalog of Genes and Diseases from OMIM

- SCHIZOPHRENIA  
<http://omim.org/entry/181500>

### Medical Genetics Database from MedGen

- Schizoaffective disorder  
<https://www.ncbi.nlm.nih.gov/medgen/11334>
- Schizoaffective disorder, bipolar type  
<https://www.ncbi.nlm.nih.gov/medgen/542781>
- Schizoaffective disorder, depressive type  
<https://www.ncbi.nlm.nih.gov/medgen/542782>

### **Sources for This Summary**

- Cardno AG, Owen MJ. Genetic relationships between schizophrenia, bipolar disorder, and schizoaffective disorder. *Schizophr Bull.* 2014 May;40(3):504-15. doi: 10.1093/schbul/sbu016. Epub 2014 Feb 24. Review.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/24567502>  
*Free article on PubMed Central:* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3984527/>
- Craddock N, Jones L, Jones IR, Kirov G, Green EK, Grozeva D, Moskvina V, Nikolov I, Hamshere ML, Vukcevic D, Caesar S, Gordon-Smith K, Fraser C, Russell E, Norton N, Breen G, St Clair D, Collier DA, Young AH, Ferrier IN, Farmer A, McGuffin P, Holmans PA; Wellcome Trust Case Control Consortium (WTCCC), Donnelly P, Owen MJ, O'Donovan MC. Strong genetic evidence for a selective influence of GABAA receptors on a component of the bipolar disorder phenotype. *Mol Psychiatry.* 2010 Feb;15(2):146-53. doi: 10.1038/mp.2008.66. Epub 2008 Jul 1. Erratum in: *Mol Psychiatry.* 2010 Nov;15(11):1121.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/19078961>  
*Free article on PubMed Central:* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3967096/>
- Green EK, Grozeva D, Moskvina V, Hamshere ML, Jones IR, Jones L, Forty L, Caesar S, Gordon-Smith K, Fraser C, Russell E, St Clair D, Young AH, Ferrier N, Farmer A, McGuffin P, Holmans PA, Owen MJ, O'Donovan MC, Craddock N. Variation at the GABAA receptor gene, Rho 1 (GABRR1) associated with susceptibility to bipolar schizoaffective disorder. *Am J Med Genet B Neuropsychiatr Genet.* 2010 Oct 5;153B(7):1347-9. doi: 10.1002/ajmg.b.31108.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/20583128>
- Laursen TM, Labouriau R, Licht RW, Bertelsen A, Munk-Olsen T, Mortensen PB. Family history of psychiatric illness as a risk factor for schizoaffective disorder: a Danish register-based cohort study. *Arch Gen Psychiatry.* 2005 Aug;62(8):841-8.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/16061761>

- Mansour HA, Talkowski ME, Wood J, Chowdari KV, McClain L, Prasad K, Montrose D, Fagiolini A, Friedman ES, Allen MH, Bowden CL, Calabrese J, El-Mallakh RS, Escamilla M, Faraone SV, Fossey MD, Gyulai L, Loftis JM, Hauser P, Ketter TA, Marangell LB, Miklowitz DJ, Nierenberg AA, Patel J, Sachs GS, Sklar P, Smoller JW, Laird N, Keshavan M, Thase ME, Axelson D, Birmaher B, Lewis D, Monk T, Frank E, Kupfer DJ, Devlin B, Nimgaonkar VL. Association study of 21 circadian genes with bipolar I disorder, schizoaffective disorder, and schizophrenia. *Bipolar Disord*. 2009 Nov; 11(7):701-10. doi: 10.1111/j.1399-5618.2009.00756.x.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/19839995>  
*Free article on PubMed Central:* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3401899/>
- Pagel T, Baldessarini RJ, Franklin J, Baethge C. Characteristics of patients diagnosed with schizoaffective disorder compared with schizophrenia and bipolar disorder. *Bipolar Disord*. 2013 May;15(3):229-39. doi: 10.1111/bdi.12057. Epub 2013 Mar 26. Review.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/23528024>
- Rink L, Pagel T, Franklin J, Baethge C. Characteristics and heterogeneity of schizoaffective disorder compared with unipolar depression and schizophrenia - a systematic literature review and meta-analysis. *J Affect Disord*. 2016 Feb;191:8-14. doi: 10.1016/j.jad.2015.10.045. Epub 2015 Nov 10. Review.  
*Citation on PubMed:* <https://www.ncbi.nlm.nih.gov/pubmed/26599364>

---

Reprinted from Genetics Home Reference:  
<https://ghr.nlm.nih.gov/condition/schizoaffective-disorder>

Reviewed: February 2018

Published: April 30, 2019

Lister Hill National Center for Biomedical Communications  
U.S. National Library of Medicine  
National Institutes of Health  
Department of Health & Human Services